Although this procedure involves additional distillation steps, the amount of alcohol required during the crystallization stage remains small compared to the case of Malik et al. –

Replacement pages 3, 3a and 4 which incorporate the foregoing amendment are submitted herewith to replace pages 3-4 of the description presently on file.

In the Claims

Claim 1, step (c), after the word "distilling", insert therefor the word:

-- only --.

Claim 1, step (d), after the word "dissolving", insert therefor the word:

-- only --

Rewrite claim 22 in independent form as follows:

- 22. A method of preparing phytosterols from tall oil pitch (1) containing steryl esters, said method comprising the steps of:
 - (a) converting said steryl esters to free phytosterols while in said pitch to produce a modified pitch (11) containing said free phytosterols;
 - (b) distilling said modified pitch (11) in a first evaporator (12) to remove light ends (13) from said modified pitch and produce a bottom fraction (14) containing said free phytosterols;
 - (c) distilling only said bottom fraction (14) in a second evaporator (15) to produce a light phase distillate (16) containing said free phytosterols;
 - (d) re-distilling only said light phase distillate (16) to enhance the concentration of free phytosterols in said light phase distillate;
 - (e) dissolving only said re-distilled light phase distillate in a solvent (21) comprising an alcohol to produce a solution containing said free phytosterols;
 - (f) cooling said solution to produce a slurry (19) with said free phytosterols crystallized in said slurry; and,
 - (g) washing and filtering said slurry (19) to isolate said crystallized phytosterols (22).

Claim 23, first line, delete the words "water is added in step (d)", and insert therefor the words:

-- said solvent (21) further comprises water added -.

Add a new claim 26 as follows:

26. Phytosterols prepared from tall oil pitch in accordance with the method as defined in any one or more of the preceding claims.

Substitute pages 14, 16 and 17 which incorporate the foregoing amendments are submitted herewith to replace pages 14, 16 and 17 of claims presently on file.

REMARKS

Purpose of Amendments

The amendment to the description has been made in view of the Examiner's invitation under section VII of the Written Opinion to cite reference D1. As well, the description has been amended to better conform the SUMMARY OF THE INVENTION with the amended claims.

Claims 1 and 22 have been amended in order to clarify these claims and to more clearly distinguish the invention as defined in the claims from the prior art. The amendment to claim 23 is in part consequent upon the amendment to claim 22, but also serves to clarify that the addition of water as specified in claim 23 should not be considered as a step independent of providing the basic solvent specified in claim 22. Claim 22 requires a solvent "comprising" alcohol. Since the word "comprising" is not exhaustive, the solvent in claim 22 may or may not include water. In contrast, claim 23 dictates that the solvent includes water.

New claim 26 has been added to better ensure that the applicants receive the full scope of protection to which they are considered to be entitled. Since the methods specified in claims 1-25 are believed to be novel, it follows that phytosterols when prepared in accordance with any one or more of those methods should be considered novel.

Detailed Remarks

In section V of the Written Opinion, the Examiner expressed the opinion that the subject matter of claims 1-7, 11, 12, 15, 16, 19-22 and 25 was not new in view of D1 since the process described in D1 involves all the procedural steps (a) - (f) as recited in the claims. Further, the Examiner expressed the opinion that the wording of claim 1 did not exclude additional process steps like those of Malik et al. and that, accordingly, the method as defined in claim 1 appeared to be anticipated by D1.